

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A capping head device for application of a cap to a container, comprising:

a casing having an end mouth designed to fit on the container so as to define a closed chamber;

a capping head disposed within said chamber, said capping head directly contacting the caps so as to apply the cap to the container; and

means for connecting said closed chamber with a source of vacuum for the purpose of communicating said vacuum to the space inside the container before the end of application of the cap on the container, said connecting means being configured to control fluid communication between said closed chamber and said source of vacuum in direct dependence on the relative axial position of said casing with respect to said capping head,

wherein said casing is mounted on said capping head so as to be movable therewith towards and away from the container, and that said closed chamber is defined by said casing when the casing engages the container as a result of the lowering movement of the capping head onto the container.

2. (previously presented): The capping head device according to Claim 1, wherein said casing is mounted on the structure of the capping head with interposition of rolling

bearings and has its end mouth made in an end wall that is elastically compliant within the casing.

3. (previously presented): The capping head device according to Claim 2, wherein said connection means comprise valve means set between the structure of the casing and the structure of the capping head.

4. (currently amended): The capping head device according to Claim 3, wherein said valve means comprise a valve body rigidly connected to the casing and mounted to be axially slidable~~with the possibility of axial sliding~~ with respect to a valve element, which is mounted with interposition of the aforesaid rolling bearings on the structure of the capping head, and

wherein said valve element has two opposite operating positions, in one of which it connects a chamber communicating with the space inside the casing to an opening for connection with the source of vacuum and in the other of which it connects the aforesaid chamber to an opening for connection to a discharge.

5. (canceled).

6. (canceled).

7. (previously presented): A capping machine, wherein it comprises one or more capping head devices according to claim 1.

8. (canceled)

9. (previously presented): The capping device of claim 1 further comprising a seal ring provided on said end mouth of said casing to provide a seal between the casing and the container.

10. (previously presented): The capping device of claim 1, wherein said capping head includes means for imparting rotation to said caps.

Claims 11-16: (canceled).

17. (previously presented): The capping device of claim 1, wherein an exterior of said container below said casing is outside said chamber and not subjected to said vacuum when said casing engages said container.

18. (previously presented): A capping head device for application of a cap to a container, comprising:

a casing having an end mouth designed to fit on the container so as to define a close chamber;

a capping head disposed within said chamber, said capping head directly contacting the caps so as to apply the cap to the container; and

means for connecting said closed chamber with a source of vacuum for the purpose of communicating said vacuum to the space inside the container before the end of application of the cap on the container;

wherein said casing is mounted on said capping head so as to be movable therewith towards and away from the container, and that said closed chamber is defined by said casing when the casing engages the container as a result of the lowering movement of the capping head onto the container; and

wherein said casing is mounted on the structure of the capping head with the interposition of rolling bearings, the capping head including means for imparting rotation to said caps.

Kindly add the following new claim:

Claim 19. (new:) A capping head device for application of a cap to a container, comprising:

a casing having an end mouth designed to fit on the container so as to define a closed chamber;

a capping head disposed within said chamber, said capping head directly contacting the caps so as to apply the cap to the container; and

means for connecting said closed chamber with a source of vacuum for the purpose of communicating said vacuum to the space inside the container before the end of application of the cap on the container, said connecting means being configured to control fluid communication between said closed chamber and said source of vacuum in direct dependence on the relative axial position of said casing with respect to said capping head,

wherein said casing is mounted on said capping head so as to be movable therewith towards and away from the container, and that said closed chamber is defined by said casing when the casing engages the container as a result of the lowering movement of the capping head onto the container,

wherein said casing is mounted on the structure of the capping head with interposition of rolling bearings and has its end mouth made in an end wall that is elastically compliant within the casing, and wherein

said connection means comprise valve means set between the structure of the casing and the structure of the capping head,

said valve means comprising a valve body rigidly connected to the casing and mounted to be axially slidable with respect to a valve element, said valve element being mounted with interposition of the aforesaid rolling bearings on the structure of the capping head.